

# Chesapeake Review



## State of the Bay River Water Estimates

At the Implementation Committee meeting on Sept. 23, 1999, Mary Ellen Lev. coordinator of the Monitoring Subcommittee, presented the estimated monthly river flows in the Chesapeake Bay for the Susquehanna, Potomac, and James Rivers. These rivers represent approximately 80 percent of total flow in the Bay. February 1998 estimates illustrate the highest flow since 1951. December 1998 estimates indicate the lowest flow since 1951. In spring 1999, the area of polyhaline water (salt wedge) was double that of an average year and four times that of a wet year. There was no tidal fresh water in the mainstem Bay in the spring of 1999.

Derek Orner, National Oceanic and Atmospheric Administration, explained the effects of drought and flood on living resources (e.g., oysters and submerged aquatic vegetation) in the Bay. The drought increased the salinity of the water, thereby increasing spawning habitat for oysters. Low flow reduced flushing of larvae from the tributaries. Records from the 1992 drought indicate an increase of diseased oyster beds. Although the data are preliminary, information received to date indicates that 1999 also saw an increase in diseased oysters. Hurricane Flovd may have flushed out disease in some areas but left ovster beds covered in silt.

Submerged aquatic vegetation (SAV) showed some localized diebacks in wild celery due to high salinity, but low flow from the drought provided good water clarity, which probably contributed to the tenfold increase in SAV in the Bloodsworth (Continued on page 3)



Fort Belvoir volunteers cleaned up Uncle Sam's back yard at Accotink Bay Wildlife Refuge on Sept. 25, 1999.

### Volunteers Spruce Up Post Wildlife Refuge

By Nelia Schrum, Assistant Editor Belvoir Eagle

(This article was printed in the Belvoir Eagle on Sept. 30, 1999, and is reprinted with permission from the Fort Belvoir Public Affairs Office.)

As Nurse Practitioner Madeline Myers rode the bus heading for the hinterlands of Accotink Bay Wildlife Refuge, she was thinking about giving something back to the wildlife refuge she frequently visits.

"I come out here at least once a week, just to connect. It's wonderful to repay a place I find so much peace and solitude in," said Myers, who works in DeWitt Army Community Hospital's Family Practice Clinic here.

Myers and 38 other volunteers joined forces Saturday as part of the National Public Lands Day, a nationwide event in which volunteers come together to spruce up Uncle Sam's acres, including more than 170 sites in 46 states. Armed with shovels, hammers, picks, and a willing spirit, the event involves about 30,000 volunteers across the United States.

The post's National Public Lands Day coordinator, Marcia Kicos, said that although National Public Lands Day is celebrating its sixth year, this is the first time a Department of Defense organization participated. At Fort Belvoir, the 1,630-acre Accotink Bay Wildlife Refuge was selected as the land improvement site.

"This was a great overall project," Kicos said. "The folks from the National Environmental Education Training Foundation helped us out. We got \$6,000 from the Legacy Program, a DoD environmental initiative to help improve the site. The labor is done by volunteers."

Accotink Bay Wildlife Refuge and the Jackson Miles Abbott Wetland Refuge account for 1,800 acres of land on Fort Belvoir, along with a corridor for animals.

"It's part of our post management philosophy to have environmental sensitive areas. The areas are home to more than 200 species of migratory animals," she said.

Fort Belvoir volunteers rolled up their sleeves to perform several tasks, including repairing trail treads with wood chips, installing a park bench overlooking Accotink Bay, and building a fence and interpretative plaque near what used to be the McCarthy family cemetery. Headstones marking the graves of Daniel McCarthy, his wife, Sarah, and his grandfather, Maj. Dennis McCarthy, were once located on the tract, but were relocated in the mid 1900s.

Kicos had hoped to recruit 100 volunteers for the day not only to clean up the refuge, but to give them the opportunity to discover the abundance of nature that calls the refuge home.

"I was hoping for more volunteers, but for the number of people (Continued on page 2)

#### Volunteers at Belvoir

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we've had, they've done an amazing amount of work. They've done an awesome job," Kicos said. "Hopefully all the people introduced to the refuge will come back to enjoy it."

The Holland family of five took up the call to provide helping hands for America's lands as a family event.

"The goal was to come out for the day and do whatever we could do to help," said Casey Holland, adding that the family had helped previously with a Girl Scout project at the refuge.

Those who participated in National Public Lands Day were treated to a short course on outdoor ethics by Hall Hallet, a member of the nonprofit organization, Leave No Trace. "Every time you go out there you can do things to make things better," Hallet said.

"While visiting public lands, you should remember to take only memories and leave only footprints. Enjoy these places, but I don't want to ever know you were there," he added.

## Planning Tips for Earth Day 2000

By Lori Davis, USAEC Public Affairs

In recognition of the importance of environmental awareness in the new millennium, the Army's Earth Day 2000 theme is "Preserving the Past, Protecting the Future." To help installations prepare meaning-

ful Earth Day programs that will promote awareness of Army environmental achievements, the U.S. Army Environmental Center has launched its Army Earth Day web site. The site contains information on the history of Earth Day, an organizer's guide to planning observances, downloadable resources and examples of installation activities, and links to other resources.

Earth Day is an international event that fosters greater understanding of the importance of sustainable environmental practices and mobilizes community support. It is also a symbolic affirmation of our commitment to environmental stewardship throughout the year.

On this special day, installations can invite the public on post to see how the Army meets its environmental responsibilities, join in Earth Day events with the local community, or have environmental experts give informative talks at neighboring schools. It is also an opportunity to demonstrate to the public how the Army maintains force readiness while protecting the environment by teaching soldiers to be good environmental stewards, planning training missions to minimize negative impacts on the environment, and monitoring the effects of training and making necessary repairs.

Army installations are good places to live and work because Army leaders and environmental professionals place such importance on proper management of natural and cultural resources. By sharing ideas and seeking ways to partner, Army installations and their neighbors can work together for a safe and

healthy community for all, and help foster readiness in the process.

Visit the USAEC Army Earth Day 2000 web site at: http://aec.army.mil/prod/usaec/op/earthday/ed\_set.htm. To order Army Earth Day posters or for more information, contact the Army Earth Day 2000 coordinator: Lori Davis (J.M. Waller Associates, Inc.), USAEC Public Affairs, (410) 436-1272 or DSN 584-1272.

## FAC Highlights Important FACts

The Federal Agencies Committee (FAC) met on Oct. 21, 1999, at the Chesapeake Bay Program Office in Annapolis, Maryland. The meeting was dedicated to follow-up actions from the August meeting, workgroup updates, and an overview of the status of commitments in the 1998 Federal Agencies Chesapeake Ecosystem Unified Plan. Announcements from this meeting include the following:

#### **Executive Council Meeting**

■ The Chesapeake Executive Council meeting was held Dec. 7–8, 1999, at the Wye Institute Conference Center in Maryland.

#### **FAC Membership Update**

■ The Army Corps of Engineers introduced Heather Wells as a new Chesapeake Bay Program FAC member. In addition to her role as an on-site liaison to the Bay Program from the Army Corps, Wells will also provide staff support to the FAC.



This newsletter is produced by Horne Engineering Services, Inc. under Contract No. DACA31-97-D-0051 for the U.S. Army Environmental Center (USAEC). Please contact Janmichael Graine, USAEC at (410) 436-7113, DSN 584-7113, *Janmichael.Graine@daapgea050.apgea.army.mil* with any questions, comments, or installation success stories.

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The newsletter is distributed via U.S. Mail and e-mail. It can also be viewed on the Army Chesapeake Bay Program home page. The home page address is <a href="https://www.hqda.army.mil/acimweb/env/cbi/index.htm">www.hqda.army.mil/acimweb/env/cbi/index.htm</a> If you want to be on the distribution list, contact Alison Cooley, Horne Engineering Services, Inc., at <a href="https://accord.org/accord.org/">accord.org/</a> or call (703) 641-1100.

#### **FAC Meeting Update**

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■ Jon Capacasa, deputy director of the Chesapeake Bay Program and FAC member, has left his position to become the acting director of Environmental Protection Agency (EPA), Region III Water Programs Division. Diana Escher, formerly a deputy with the EPA, Region III Environmental Services Division, is the new deputy director for the Bay Program.

#### Chesapeake 2000 Update

■ A steering committee, involving the six Bay watershed states and EPA met January 19 at Bellview State Park in Delaware to discuss criteria for a new water quality goal that addresses total maximum daily load issues within the Bay. A future meeting is tentatively scheduled to be held in New York State in April, and FAC members are invited to attend. Other goals within the draft Chesapeake 2000 (C2K) Agreement include a goal for increasing oyster populations and a harvest target for crabs. The Communications Subcommittee will hold a series of forums for state agencies that currently have no direct involvement with the C2K planning process. If there is interest, similar forums will be offered for representatives of federal agencies.

### Conservation Landscaping Seminar

■ Britt Slattery of the U.S. Fish and Wildlife Service announced that a conservation landscaping seminar for federal facilities will be held at the U.S. Fish and Wildlife Service National Conservation Training Center in Shepherdstown, West Virginia. The seminar originally scheduled for March 6–10 has been rescheduled to Sept. 11–15. The seminar is sponsored by the U.S. Army, the U.S. Fish and Wildlife Service, and the Chesapeake Bay Program. The basic agenda will include presentations

on conservation landscaping and BayScaping, including challenges, costs, and maintenance of projects. Showcase examples will be presented from various federal agencies. Hands-on activities will include sessions on implementation and site assessments. To receive a registration brochure, contact Alison Cooley of Horne Engineering Services, Inc. via e-mail: acooley @horne.com.

### Potomac American Heritage Rivers Initiative

■ The FAC recently signed a
Potomac American Heritage River
(AHR) Watershed Agreement with
the Friends of the Potomac. In this
agreement, FAC members agreed
to support projects within the
Potomac AHR Annual Project
Report, participate in the Potomac
AHR Initiative through their federal
team, provide an inventory of
federal programs and assistance
that could support Potomac AHR
projects, and make geographic
information for the Potomac River
Basin more readily available.

#### **Workgroup Updates**

- The Habitat Restoration
  Workgroup of the FAC is working
  to help prepare a Beneficial Use
  Comprehensive Plan for dredged
  material. A program to identify
  potential sites for localized
  beneficial use projects on public
  lands is scheduled to be completed on December 31. The goal
  of the plan will be to complete five
  projects in each Bay watershed
  state over the next five years.
- The Federal Science Coordination Workgroup is planning a second Federal Science Conference as a follow-up to the one held in 1998. The conference is tentatively being planned for December at the University of Maryland at College Park.

### Federal Agencies Chesapeake Ecosystem Unified Plan

A number of commitments under the

1998 Unified Plan have been accomplished fully or in part. To date, federal partners within the Chesapeake Bay Program have accomplished the following:

- Identified relevant federal landholdings for full participation in the American Heritage Rivers Program for the Potomac and Upper Susquehanna/Lackawanna Rivers.
- Identified closed shellfish beds adjacent to federal lands in the Chesapeake Bay watershed.
- ■Developed a pilot Bay Partner Facility Program.
- Signed a partnership agreement with the Potomac American Heritage Rivers Program.
- Held high-level meetings to discuss the implementation of wet weather pollution prevention on federal facilities in the Anacostia River and Rock Creek watersheds.
- Completed federal facility demonstration sites for stream corridor restoration technology on the Beltsville Agricultural Research Center, the Patuxent Naval Air Station, and the Yorktown Naval Weapons Center.
- Begun identifying blockages to anadromous fish on federal lands.
- Identified four aquatic reef sites at nearshore areas adjacent to federal facilities, in accordance with the Chesapeake Bay Program's Framework for Habitat Restoration and the Aquatic Reef Habitat Plan.

## State of the Bay River Water Estimates

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Island area. Hurricane Floyd increased turbidity and washed away plants but may have spread seeds. Data on finfish, which have a high range of salinity tolerance, indicated a shift in geographic distribution and spawning age. The blue crab harvest did not start off well in 1999, but it improved steadily and is expected to end on a strong note for the year.

# IC Highlights Meeting Announcements

Two Implementation Committee (IC) meetings were held on Sept. 23 and Oct. 28, 1999, at the Chesapeake Bay Program Office in Annapolis, Maryland. Announcements and highlights from these meetings include the following:

- The IC amended and approved a letter to be sent to the Norfolk District, Philadelphia District, and Baltimore District of the U.S. Army Corps of Engineers about consistent regional criteria for nationwide general permits to develop wetlands.
- The IC agreed to all the conditions explained in the Adoption Statement on Wetlands Protection and Restoration Goals except for the preservation goal. This portion of the goal will be discussed at the next Principal Staff Committee meeting.
- A draft report on Directive 98-4, Interstate Animal Waste Distribution and Use Technology, was accepted by the IC. The report identifies possible roles for the Chesapeake Bay Program, government, industry, and others in controlling animal waste distribution and use.
- Kim Coble, Chesapeake Bay Foundation, presented a proposed goal to eliminate point source mixing zones. A letter is being drafted to send to the Environmental Protection Agency Administrator Carol Browner, asking her to support this initiative and to make a statement regarding point source mixing zones and the Chesapeake Bay.
- A Memorandum of Agreement was signed by the Chesapeake Bay Program and Versar, Inc., on Oct. 28, 1999. Versar will maintain the benthic monitoring data on their web site.

- The Business for the Bay Awards ceremony was held on Dec. 3, 1999, at the Governor Calvert House in Annapolis, Maryland.
- The Chesapeake Bay Program Education Summit was held Oct. 7–8, 1999. Sixty-eight participants from the District of Columbia, Maryland, Pennsylvania, Virginia, and the federal government attended. Many issues were discussed, including how to provide more "in the field" experience, identifying and using effective environmental education materials, and using the Internet as an educational resource.
- There is a new look to the Chesapeake Bay Program's web site. Check it out at: http:// www.chesapeakebay.net.

## State of the Bay SAV Update

At the Implementation Committee meeting on Oct. 28, 1999, Ryan Davis, Alliance for the Chesapeake Bay, and Peter Bergstrom, U.S. Fish and Wildlife Service, explained how citizen monitoring data are used to identify submerged aquatic vegetation (SAV) restoration sites and to refine SAV habitat requirements. SAV is important to the health of an estuary because it provides habitat, stabilizes the sediment, and filters nutrients from the water column.

Over the last few decades, SAV has declined in the Chesapeake Bay due to low light levels and poor water quality conditions. The Citizen Monitoring Program monitors SAV habitat requirements such as temperature, salinity, and chlorophyll a. SAV monitoring is an excellent opportunity to involve the community and establish partnerships.

Military installations, including Langley Air Force Base, Fort Monroe, and Fort Eustis are participating in water quality monitoring to implement their SAV restoration programs.

There are 175 active monitoring stations basin-wide. One example is the St. Mary's River Project, which has joined with The Alliance for the Chesapeake Bay to expand the Citizen Monitoring Program. The St. Mary's River Project is funded by an **Environmental Protection Agency** grant to allow St. Mary's College of Maryland to study the St. Mary's River and its watershed. The primary objective of the grant is to establish a long-term monitoring program to assess the river's ecological health and to document physical, chemical. and biological integrity changes of the river.

The St. Mary's River Project will establish baseline water quality data for the tidal and non-tidal portions of the river. Research is being conducted to determine the effects of storm events on water quality. The long-term goals of tidal monitoring are to establish baseline data for water quality parameters, as well as determine possible sources of nutrients and sediments. Data collected will assist scientists in determining optimal conditions for transplantation of SAV. The data will also be used to assess the effects of land use on the river as the watershed becomes more developed. Ultimately, the Alliance for the Chesapeake Bay plans to make all the data collected available on the World Wide Web.

#### **Upcoming Workshop**

The Department of Defense and the Environmental Protection Agency, Region III are sponsoring a workshop on Non-Indigenous Species in the Mid-Atlantic. The workshop was scheduled for Jan. 25 and 26 at the Fort Meade golf facility, but it has been postponed because of the snow storm that hit the Fort Meade area on those days. A new date is expected to be announced soon. For more information, call Alison Cooley of Horne Engineering Services at (703) 641-1100.